# abcam

### Product datasheet

## Anti-S6K1 antibody ab14708

4 References 3 图像

概述

产**品名称** Anti-S6K1抗体

描述 山羊多克隆抗体to S6K1

**宿主** Goat

经测试应用 **适用于:** WB, IHC-P

种属反应性 与反应: Mouse, Human

预测可用于: Rat, Rabbit, Cow, Dog, Xenopus laevis 4

免疫原 Synthetic peptide: MISKRPEHLRMNL, corresponding to amino acids 490-502 of S6K1.

常规说明

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

性能

形式 Liquic

存放说明 Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw

cycles.

**存储溶液** pH: 7.30

Preservative: 0.02% Sodium azide

Constituents: Tris buffered saline, 0.5% BSA

纯**度** Immunogen affinity purified

纯**化**说明 Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity

chromatography using the immunizing peptide.

**克隆** 多克隆

**同种型** lgG

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#### The Abpromise guarantee

#### Abpromise™承诺保证使用ab14708于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		Use a concentration of 0.05 - 0.1 µg/ml. Detects a band of approximately 65-70 kDa (predicted molecular weight: 60 kDa). A 1 hour primary incubation is recommended for this product.
IHC-P		Use a concentration of 2 - 4 $\mu$ g/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

#### 靶标

#### 功能

Acts to integrate nutrient and growth factor signals in regulation of protein synthesis, cell proliferation, cell growth, cell cycle progression and cell survival. Downstream effector of the mTOR signaling pathway. Phosphorylates specifically ribosomal protein S6 in response to insulin or several classes of mitogens. During translation initiation, the inactive form associatess with the eIF-3 complex under conditions of nutrient depletion. Mitogenic stimulation leads to phosphorylation and dissociation from the eIF-3 complex and the free activated form can phosphorylate other translational targets including EIF4B. Promotes protein synthesis by phosphorylating PDCD4 at 'Ser-67' and targeting it for degradation. Phosphorylates RICTOR leading to regulation of mammalian target of rapamycin complex 2 (mTORC2) signaling; probably phosphorylates RICTOR at 'Thr-1135'. Phosphorylates IRS1 at multiple serine residues coupled with insulin resistance; probably phosphorylates IRS1 at 'Ser-270'. Required for TNF-alpha induced IRS-1 degradation. Phosphorylates EEF2K in response to IGF1 and inhibits EEF2K activity. Phosphorylates BAD at 'Ser-99' in response to IGF1 leading to BAD inactivation and inhibition of BAD-induced apoptosis. Phosphorylates mitochondrial RMP leading to dissociation of a RMP:PPP1CC complex; probably phosphorylates RMP at 'Ser-99'. The free mitochondrial PPP1CC can dephosphorylate RPS6KB1 at Thr-412 which is proposed to be a negative feed back mechanism for the RPS6KB1 antiapoptotic function. Phosphorylates GSK3B at 'Ser-9' under conditions leading to loss of the TSC1-TSC2 complex. Phosphorylates POLDIP3.

组织特异性

Widely expressed.

序列相似性

Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. S6 kinase

subfamily.

Contains 1 AGC-kinase C-terminal domain.

Contains 1 protein kinase domain.

结构域

The autoinhibitory domain is believed to block phosphorylation within the AGC-kinase C-terminal

domain and the activation loop.

The TOS (TOR signaling) motif is essential for activation by mTORC1.

翻译后修饰

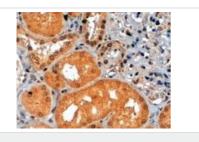
Phosphorylation at Thr-412 is regulated by mTORC1. The phosphorylation at this site is

maintained by an agonist-dependent autophosphorylation mechanism.

细胞定位

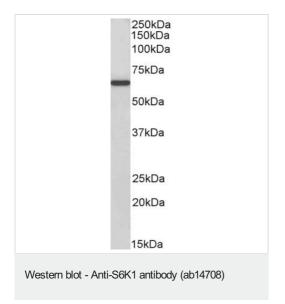
Cytoplasm; Nucleus. Cytoplasm and Cell junction > synapse > synaptosome. Mitochondrion outer

membrane.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-S6K1 antibody (ab14708)

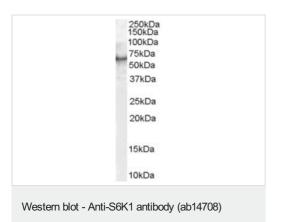
ab14708 (2µg/ml) staining of paraffin embedded Human Kidney shows staining in the cytoplasm-rich PCT while less so in the DCT and no signals in the glomerulus. following steamed antigen retrieval with citrate buffer pH 6 and HRP-staining.



Anti-S6K1 antibody (ab14708) at 1  $\mu$ g/ml + NIH3T3 cell lysate (in RIPA buffer). at 35  $\mu$ g

Predicted band size: 60 kDa

Detected by chemiluminescence.



Anti-S6K1 antibody (ab14708) at 0.3  $\mu$ g/ml + Human Placenta lysate (in RIPA buffer) at 35  $\mu$ g

Predicted band size: 60 kDa

Detected by chemiluminescence.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- · Replacement or refund for products not performing as stated on the datasheet
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- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
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